K 020603

## 510(k) SUMMARY

# Safety and Effectiveness

"This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92

CRPex-HS C-Reactive Protein LIT Assay

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#### **Submitter**

Name,

Good Biotech Corp.

Address,

38 34<sup>th</sup> Rd. Taichung Industrial Park Taichung City 407 Taiwan

R.O.C.

Telephone number,

+886-4-23596873

Contact person,

Victor Chiou

Preparation date

Feburary 21, 2002

## **Device**

Trade name,

CRPex-HS C-reactive protein LIT assay

Common name,

CRP immunological diagnostic assay

Classification name

C-reactive protein immunological test system (21CFR 866.5270)

#### **Predicate Device**

Trade name,

Wako CRP-UL

510(k) number

K003342

#### **Description**

CRPex-HS C-reactive protein LIT assay is the ready-to-use reagent suitable for quantification of C-reactive protein by latex particle enhanced immunoturbidimetry (LIT). Duck anti-CRP IgY ( $\Delta$ Fc) is coupled to polystyrene microparticles, which greatly increased the analytical sensitivity. CRPex-HS C-reactive protein LIT assay is a hs-CRP assay for CRP quantification in the lower range.

## Intended Use

Good Biotech Corp. CRPex-HS C-reactive protein LIT assay is intended to be used for quantitative determination of C-reactive protein in serum. The measurement of C-reactive protein is useful for the detection and evaluation of infection, tissue injury, inflammatory disorders and associated diseases. For *in vitro* diagnostic use.

## Substantial Equivalence

CRPex-HS C-reactive protein LIT assay is compared with Wako CRP-UL to demonstrate the substantial equivalence.

CRPex-HS CDD AT				
Item\Device	C-reactive LIT assay	Wako CRP-UL		
	Measurement of	Measurement of		
Intended Use	1 7			
	C-reactive protein is	C-reactive protein is		
	useful for the detection	useful for the detection		
	and evaluation of	and evaluation of		
	infection, tissue injury,	infection, tissue injury,		
	inflammatory disorders	inflammatory disorders		
	and associated diseases.	and associated diseases.		
Methodology	Latex particle enhanced	Latex particle enhanced		
	immunoturbidimetry	immunoturbidimetry		
Test Objective	C-reactive protein	C-reactive protein		
	C-reactive protein	C-reactive protein		
Test Principle	T	T		
	Latex microparticle	Latex microparticle		
	agglutination based on	agglutination based on		
	antigen-antibody reaction.	antigen-antibody reaction.		
Type of Test	Quantitative	Quantitative		
Product Type		Buffer:		
	Reagent 1 (R 1):	Reactive buffer solution		
	Reactive buffer solution	Latex reagent:		
	Reagent 2 (R 2):	Latex suspension		
	Latex suspension	Diluent:		
		Sample diluent		

Antibody [Source]	Duck anti-CRP IgY(ΔFc) 【Egg Yolk 】	Goat anti-CRP antibodies [Serum]	
Sterility	N.A.	N.A.	
Stability	2-10 °C Opened: 1 month	2-10 °C Opened: 1 month	
Specimen	Human serum	Human serum	
Operating Requirement	For professional use only	For professional use only	
Calibration Mode	Spline	Spline	
Calibrator	Wako CRP-UL Calibrator Set (5 concentrations)	Wako CRP-UL Calibrator Set (5 concentrations)	
Sample Volume	8 µl/test	3 (6) μl/test	
	R1: 120 µl/test	R1: 270 µl/test	
Reagent Volume	R2: 120 μl/test	R2: 60 µl/test	
Wavelength Selection	Main-wavelength: 570 nm Sub-wavelength: 800 nm	Main-wavelength:700 nm	
Assay Code [Hitachi 717 (7150)]	2 point: (27)-(33)	2 point: (28)-(50)	
Assay Range	0.05-20 mg/L	0.1-10 mg/L (sample volume= 3 μl) 0.05-5 mg/L (sample volume= 6 μl)	
Calibration Curve	Nearly linear	Nearly linear	
Interference	Bilirubin:  up to 45 mg/dl  unconjugated bilirubin Hemolysis:  up to 800-mg/dl hemoglobin Lipemia:  up to 10 g/L Liposyn® (fat emulsion)	Ascorbic acid: up to 50 mg/L Free bilirubin: up to 50 mg/dl Hemoglobin: up to 500 mg/dl Intrafat: up to 5.0 %	

## Correlation

y=0.9293x + 0.169 x=Wako CRP-UL y= CRPex-HS C-reactive protein LIT assay R<sup>2</sup>=0.991 N=141

## Conclusion

Good Biotech Corp.'s CRPex-HS C-reactive protein LIT assay is substantially equivalent to the predicate device Wako CRP-UL.

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#### **DEPARTMENT OF HEALTH & HUMAN SERVICES**

Food and Drug Administration 2098 Gaither Road Rockville MD 20850

## JUN 1 3 2002

Mr. Victor Chiou President Good Biotech Corp. 38 34<sup>th</sup> Road Taichung Industrial Park Taichung 407 Taiwan R. O. C.

Re: k020603

Trade/Device Name: CRPex-HS C-reactive protein LIT assay

Regulation Number: 21 CFR 866.5270

Regulation Name: C-reactive protein immunological test system

Regulatory Class: Class II

Product Code: DCN Dated: May 9, 2002 Received: May 9, 2002

Dear Mr. Chiou:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsma/dsmamain.html".

Sincerely yours,

Steven I. Gutman, M.D., M.B.A.

Director

Division of Clinical Laboratory-Devices

Steven Dutman

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

# STATEMENT OF INDICATIONS FOR USE

510(k) Number (if known): K<u>のえのゆ</u>の3

Device Name:	CRPex-HS C-react	ive protein	LIT assay
Indications Fo	or Use:		
the quantitative dimmunoturbidime	etermination of C-react etry (LIT). Measuremen infection, tissue injury,	ive protein in it of C-reacti	T assay is intended to be used for a serum by latex particle enhanced we protein is useful for the detection by disorders and associated diseases
(PLEASE DO NOT V	WRITE BELOW THIS LINI	E - CONTINUI	E ON ANOTHER PAGE IF NEEDED)
Соп	currence of CDRH, O	ffice of Devi	ice Evaluation (ODE)
	Sean C	00P	<u></u>
	(Division Sign-Off) Division of Clinical Laboration (K) Number 4	20653	
Prescription Use	<u> </u>	OR	Over-The-Counter Use
(Per 21 CFR 801.)	109)		(Optional Format 1-2-96)